

Workshop Program



Workshop on the Role of Synchrotron Radiation in Solving Scientific Challenges in Advanced Nuclear Energy Systems

27 to 28 January 2010

at Argonne's Advanced Photon Source

27 January 2009

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|---------------|---|
| 7:45 – 8:15 | <u>Registration APS Lobby</u> |
| 8:15 – 8:25 | Al Sattelberger (Associate Laboratory Director ESE) Welcome |
| 8:25 – 9:00 | Murray Gibson (Associate Laboratory Director APS) Welcome |
| | Denny Mills (APS, ANL) Introduction to the APS |
| 9:00 – 9:50 | Gerry Lander (ITU, retired) Research on transuranium systems:
present capabilities with large central facilities |
| 9:50 – 10:10 | <u>Break</u> |
| 10:10 – 11:00 | Steve Zinkle (ORNL) Radiation effects in nuclear structural materials
and advanced fuels |
| 11:00 – 11:50 | Mark Antonio (ANL) Probing structural, morphological, and
electrochemical aspects of actinide speciation through synchrotron
studies |

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11:50 – 12:00	<u>Charge to working groups</u>
12:00 – 1:00	<u>Working Lunch</u>
1:00 – 1:40	Henning Paulsen (DTU-Risø) 4D tools for studying microstructure dynamics
1:40 – 2:20	Gene Ice (ORNL) Microbeam, timing, and wavelength dispersive studies of nuclear materials using 3 rd and 4 th generation synchrotron sources
2:20 – 3:00	Philippe Martin (CEA, France) XAS characterization of nuclear fuels
3:00 – 3:20	<u>Break</u>
3:20 – 4:00	Jon Carmack (INL) Fuel Cycle R & D Advanced Fuel Development
4:00 – 4:40	Paul Fenter (ANL) In-situ imaging of structures and processes at interfaces with x-rays
4:45 – 5:15	<u>Breakout Session</u>
5:30	<u>Poster Session</u> – Gallery

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8:00 – 8:40	Todd Allen (U. Wisconsin, ATR/INL) Radiation effect studies for ANS systems and the role of national user facilities
8:40 – 9:20	James Tobin (LLNL) A path forward to advanced nuclear fuels
9:20 – 9:50	Lynda Soderholm (ANL) Experiments with radioactive samples at the APS
9:50 – 10:00	<u>Break</u>
10:00 – 11:00	<u>Panel Discussion</u>
11:00 – 3:30	<u>Breakout Session</u>
	<u>Working Lunch</u>
3:30 – 4:00	<u>Report Summary</u>
4:00	<u>Close</u>